A corrected version of my February 6, 2003 letter to Chairman Powell, cc: other Commissioners. Corrections made to last paragraph only.

Re: Triennial Review of the Commission's Unbundling Rules
CC Docket Nos. 96-98, 98-147, 01-338
Subject: Line Sharing

Dear Chairman Powell,

I'm writing to you as a U.S. citizen, unbeholden to ILEC, CLEC, ISP, cableco, equipment manufacturer, or system integrator, who would like to see the benefits of technology and architecture improvements, such as those reflected in Moore's Law and The End-to-End Principle, realized for the benefit of all U.S. citizens.

Recently, I co-signed a letter asking you to forbear from any FCC action that would slow down what we see as the slow-motion failure of the ILECs. Now, before the Triennial Review comment period ends, I'd like to address another topic that came up in a recent discussion with Chairman Powell's Special Policy Advisor, Jon Cody.

The issue is line sharing. I sympathize with competitive DSL providers who need access to ILEC local loops, but the issue is much, much larger. Fiber-to-the-home (FTTH) will soon be common in the United States; while the absolute number of FTTH homes is small, it grew at over 100% last year and this year.

Each fiber affords DC-to-daylight bandwidth. With currently available technology, a single fiber can carry 40 gigabits on each of 40 wavelengths; theoretically, the entire busy hour throughput of conventional U.S. telephony could be carried on two fibers. Looking at fiber capacity another way, 100 Mbit/s FTTH can be installed for a capital expenditure of US$600 to $3000 per home. Within a few years gigabit, and then 10 gigabit, fiber interfaces will be equally affordable.

In other words, where fiber exists, there is a lot to share.

Once fiber exists in a neighborhood, there is no economic reason to install a second fiber cable -- one cable, even one fiber, can literally carry everything. My concern is that if owners of newly installed fiber are not required to treat all potential users fairly -- that is, if there is not some form of line sharing, or perhaps a more radical form of structural separation -- the owner of the fiber could use the economic power inherent in the fiber's capacity to exclude other facilities-based competitors, e.g., with cut-throat underpricing. At the same time, the fiber owner would have powerful motivation to control its use via "commercial arrangements" regarding access. It is not difficult to imagine a new robber-baron scenario.

The ILECs have promised investment in advanced network technology in return for rate relief. But this is not a new promise, and the ILEC trail of broken promises is well-worn. I urge you to resist calls to weaken or eliminate line sharing, to be cognizant that changes in line sharing regulations for copper loops could set a dangerous precedent for fiber, and to resist proposals like that of Commissioner Martin's, which would have the FCC forbear from any regulation of new fiber.

Sincerely,

David S. Isenberg
isen@isen.com
203-661-4798